- Postharvest technologies

  Partnership activities also a and marketability of locally improved postharvest technologies Partnership activities also aimed at enhancing the quality and marketability of locally produced rice through improved postharvest technologies.
  - The following technologies were developed with national partners, including NARI: (i) rice-based products from low-grade broken rice fractions. (ii) gasifier stoves that convert rice husks into energy for household cooking;(iii) parboiling complexes for enhanced rice post-harvest practices; (iv) production of biochar from rice husks for soil fertility enhancement; (v) construction of the ASI thresher.

#### Rice statistics

· Accurate and reliable rice statistics database were established in The Gambia and NARI staff were trained in nationally representative rice statistics survey methodologies.

# Policy advice

- The Gambia has contributed to the development of policies resulting in key investments made by farmers. governments, the private sector and the donor community in sub-Saharan Africa, following the 2007-2008 global food crisis.
- The 28th Session of the AfricaRice Council of Ministers (CoM) was held in Banjul, chaired by The Gambia in September 2011. AfricaRice's 40th anniversary was also celebrated in Banjul, just after the CoM session as The Gambia has always been a strong advocate for rice research and development in Africa.

#### Africa-wide rice task force activities

- The Gambia has been an active member and benefited from the activities and funding of the six Africa-wide Rice Task Forces coordinated by AfricaRice -Breeding, Agronomy, Gender, Mechanization, Policy, and Processing & Value Addition.
- The Task Forces have provided a unique opportunity for Gambian researchers to interact and partner with their counterparts from other AfricaRice member countries.
- Funds contributed to The Gambia through the Task Forces have complemented government allocations significantly and ensured the continuation of research and the training of scientists and value chain

#### Rice Hubs and Innovation Platforms

- Two rice sector development hubs were identified by NARI - West Coast Region (upland) and Central River Region (irrigated).
- The rice hubs serve as field laboratories where research outputs and products are being tested, adapted and integrated with feedback provided to researchers on technology performance.

# africarice & The Gambia





# The Gambia -AfricaRice **Partnership**

June 2017

- The Gambia is a founding member of AfricaRice (ex-WARDA).
- The National Agricultural Research Institute (NARI) is one of the most important national partners of AfricaRice.
- As a member country, The Gambia takes part in statutory meetings of the AfricaRice Council of Ministers, which is the Center's highest governing body.
- The Gambia is also a member of the AfricaRice National Experts Committee.



AfricaRice is a CGIAR Research Center - part of a global research partnership for a food-secure future. It is also an intergovernmental association of African member countries. For more information visit: www.AfricaRice.org

# Af Rice is global and it is big business. Rice is life in Africa.

-- Dr Harold Roy-Macauley,





# Contributions by AfricaRice to The Gambia

- ▶ Between 2009 and 2016, The Gambia has benefited from 13 donor-funded projects, coordinated by AfricaRice.
- ▶ AfricaRice, in partnership with NARI, has contributed to boosting The Gambia's rice sector in terms of policy and technical advice, improved seed, cropping practices and processing technologies, capacity development and support to rice value chain development.

# Capacity strengthening

▶ Between 2009 and 2016, 5 PhD and 2 MSc scholars were trained. About 60 Gambians participated in group training workshops on marker-assisted selection techniques, experimental design, data collection and analysis, quality seed production, integrated rice management, and impact assessment.

# IMPORTANCE OF RICE IN THE GAMBIA

With one of the highest per capita rice consumption (117 kg) in West Africa, the Gambia has a long history of rice cultivation. Farmers were growing rice in the country long before the arrival of the Europeans.

The Gambian government has identified rice as a major food security crop and has developed a national rice development strategy (NRDS) for 2015-2024, founded on a vision of rice self–sufficiency, with a production target of 322,600 t of milled rice by 2024.

The objective of the NRDS is the creation of a competitive rice industry, which will lead to improved food security and poverty reduction. The NRDS spells out six priority actions: (i) Land development, irrigation development and paddy production, (ii) Post-harvest losses handling, (iii) Processing (value addition) and marketing, (iv) Seed development and varietal improvement; (v) Rice production inputs supply distribution; and (vi) Pests and disease management.

The Gambia possesses a range of suitable ecologies for rice production, including about 216,121 ha of lowland ecologies for rice production. The NRDS places equal emphasis on the intensification in both upland and lowland production systems and the expansion of lowland production systems.

Most of the rice consumed in The Gambia is imported. The country imported about 125,000 t of rice in 2014, while domestic production was about 48,000 t of paddy. In view of the high population growth rate (about 3% per annum), the demand for rice is expected to remain strong.

In line with its strategy to boost rice production, The Gambia, through NARI, has been collaborating with AfricaRice to develop improved rice varieties and accompanying technologies to increase rice productivity in the region.

| Rice Statistics for Selected Indicators  Source: USDA |   |  |  |
|---|---|--|--|
| 2014  | 2015  | 2016   | 2017   |
| 48,000  | 69,000                                      | 49,000   | 55,000   |
| 66,000  | 79,000                                      | 60,000   | 65,000   |
| 0.73  | 0.87  | 0.82   | 0.85   |
| 185,000   | 195,000                                     | 195,000  | 200,000  |
| 125,000   | 150,000                                     | 160,000  | 165,000  |
|   | 2014<br>48,000<br>66,000<br>0.73<br>185,000 | <b>2014 2015</b> 48,000 69,000 66,000 79,000 0.73 0.87 185,000 195,000 | Source: USDA       2014     2015     2016       48,000     69,000     49,000       66,000     79,000     60,000       0.73     0.87     0.82       185,000     195,000     195,000 |

# africarice & The Gambia





# 

Gambia-AfricaRice Achievements

- AfricaRice and NARI introduced high-yielding upland NERICA rice varieties into The Gambia with the support of an African Development Bank-funded project. The most popular NERICA varieties are NERICA 1, NERICA 3, NERICA 4 and, NERICA 6.
- NERICA adoption increased average rice yields by 157 kg per ha and annual income of small-scale rice farmers by \$148. With the profits, farmers were able to to send their children to school and provide them with better health care.
- Through the Stress Tolerant Rice for Africa and Asia (STRASA) project, many stress-tolerant varieties are being tested. Two salt-tolerant rice varieties were released in The Gambia in 2013 and a third salt-tolerant variety was selected under the ARICA brand (ARICA 11) and was released in the country in 2014. All three are suitable for the mangrove rice ecology.

# Improved management practices

 Gambian participants benefitted from a series of training workshops on integrated rice management (IRM), which aim to enrich researchers' and technicians' knowledge of IRM. This will help to bridge gaps that currently exist between actual farmers' yields and attainable yields through better crop management, and to fully exploit the potential of improved varieties. Gambian participants also benefitted from training courses on yield gap and diagnostic surveys and on the building/assembling of mini-combine harvesters.